# STATE OF CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986

# CHEMICALS KNOWN TO THE STATE TO CAUSE CANCER OR REPRODUCTIVE TOXICITY APRIL 20, 2001

The Safe Drinking Water and Toxic Enforcement Act of 1986 requires that the Governor revise and republish at least once per year the list of chemicals known to the State to cause cancer or reproductive toxicity. The identification number indicated in the following list is the Chemical Abstracts Service (CAS) Registry Number. No CAS number is given when several substances are presented as a single listing. The date refers to the initial appearance of the chemical on the list. For easy reference, chemicals which are shown underlined are newly added. Chemicals which are shown with a strikeout are chemicals recommended for removal from the list by the "state's qualified experts."

#### CHEMICALS KNOWN TO THE STATE TO CAUSE CANCER

Chemical	CAS Number	<u>Date</u>
A-alpha-C (2-Amino-9H-pyrido[2,3-b]indole)	26148685	January 1, 1990
Acetaldehyde	75070	April 1, 1988
Acetamide	60355	January 1, 1990
Acetochlor	34256821	January 1, 1989
2-Acetylaminofluorene	53963	July 1, 1987
Acifluorfen	62476599	January 1, 1990
Acrylamide	79061	January 1, 1990
Acrylonitrile	107131	July 1, 1987
Actinomycin D	50760	October 1, 1989
Adriamycin (Doxorubicin hydrochloride)	23214928	July 1, 1987
AF-2;[2-(2-furyl)-3-(5-nitro-2-furyl)]acrylamide	3688537	July 1, 1987
Aflatoxins		January 1, 1988
Alachlor	15972608	January 1, 1989
Alcoholic beverages, when associated with alcohol abuse		July 1, 1988
Aldrin	309002	July 1, 1988
Allyl chloride Delisted October 29, 1999	<del>107051</del>	<del>January 1, 1990</del>
2-Aminoanthraquinone	117793	October 1, 1989
p-Aminoazobenzene	60093	January 1, 1990
ortho-Aminoazotoluene	97563	July 1, 1987
4-Aminobiphenyl (4-aminodiphenyl)	92671	February 27, 1987
1-Amino-2,4-dibromoanthraquinone	81492	August 26, 1997
3-Amino-9-ethylcarbazole hydrochloride	6109973	July 1, 1989
2-Aminofluorene	153786	January 29, 1999
1-Amino-2-methylanthraquinone	82280	October 1, 1989
2-Amino-5-(5-nitro-2-furyl)-1,3,4-thiadiazole	712685	July 1, 1987
4-Amino-2-nitrophenol	119346	January 29, 1999
Amitrole	61825	July 1, 1987
Analgesic mixtures containing phenacetin		February 27, 1987
Aniline	62533	January 1, 1990
Aniline hydrochloride	142041	May 15, 1998
ortho-Anisidine	90040	July 1, 1987
ortho-Anisidine hydrochloride	134292	July 1, 1987
Antimony oxide (Antimony trioxide)	1309644	October 1, 1990
Aramite	140578	July 1, 1987

Arsenic (inorganic arsenic compounds) Asbestos Auramine Azacitidine Azaserine Azathioprine Azobenzene	1332214 492808 320672 115026 446866 103333	February 27, 1987 February 27, 1987 July 1, 1987 January 1, 1992 July 1, 1987 February 27, 1987 January 1, 1990
Benz[a]anthracene Benzene Benzidine [and its salts] Benzidine-based dyes Benzo[b]fluoranthene Benzo[j]fluoranthene Benzo[k]fluoranthene Benzofuran Benzofuran Benzorichloride Benzyl chloride Benzyl dyiolet 4B	56553 71432 92875  205992 205823 207089 271896 50328 98077 100447	July 1, 1987 February 27, 1987 February 27, 1987 October 1, 1992 July 1, 1987 July 1, 1987 July 1, 1987 October 1, 1990 July 1, 1987 July 1, 1987 July 1, 1987 January 1, 1990
Benzyl violet 4B Beryllium and beryllium compounds Betel quid with tobacco 2,2-Bis(bromomethyl)-1,3-propanediol Bis(2-chloroethyl)ether N,N-Bis(2-chloroethyl)-2-naphthylamine (Chlornapazine) Bischloroethyl nitrosourea (BCNU) (Carmustine) Bis(chloromethyl)ether Bis(2-chloro-1-methylethyl)ether, technical grade Bitumens, extracts of steam-refined and air refined Bracken fern Bromodichloromethane Bromoethane Bromoform 1,3-Butadiene 1,4-Butanediol dimethanesulfonate (Busulfan) Butylated hydroxyanisole beta-Butyrolactone	1694093 3296900 111444 494031 154938 542881 75274 74964 75252 106990 55981 25013165 3068880	July 1, 1987 October 1, 1987 January 1, 1990 May 1, 1996 April 1, 1988 February 27, 1987 July 1, 1987 February 27, 1987 October 29, 1999 January 1, 1990 January 1, 1990 January 1, 1990 December 22, 2000 April 1, 1991 April 1, 1988 February 27, 1987 January 1, 1990 July 1, 1987
Cacodylic acid Cadmium and cadmium compounds Caffeic acid Captafol Captan Carbazole Carbon tetrachloride Carbon-black extracts Ceramic fibers (airborne particles of respirable size) Certain combined chemotherapy for lymphomas Chlorambucil Chloramphenicol Chlordane Chlordecone (Kepone) Chlordimeform	75605 331395 2425061 133062 86748 56235 305033 56757 57749 143500 6164983	May 1, 1996 October 1, 1987 October 1, 1994 October 1, 1988 January 1, 1990 May 1, 1996 October 1, 1987 January 1, 1990 July 1, 1990 February 27, 1987 February 27, 1987 October 1, 1989 July 1, 1988 January 1, 1988 January 1, 1989

Chlorendic acid Chlorinated paraffins (Average chain length, C12; approximately 60 percent chlorine by weight)	115286 108171262	July 1, 1989 July 1, 1989
p-Chloroaniline	106478	October 1, 1994
p-Chloroaniline hydrochloride	20265967	May 15, 1998
Chlorodibromomethane Delisted October 29, 1999	124481	January 1, 1990
Chloroethane (Ethyl chloride)	75003	July 1, 1990
1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea (CCNU) (Lomustine)	13010474	January 1, 1988
1-(2-Chloroethyl)-3-(4-methylcyclohexyl)-1- nitrosourea (Methyl-CCNU)	13909096	October 1, 1988
Chloroform	67663	October 1, 1987
Chloromethyl methyl ether (technical grade)	107302	February 27, 1987
3-Chloro-2-methylpropene	563473	July 1, 1989
1-Chloro-4-nitrobenzene	100005	October 29, 1999
4-Chloro-ortho-phenylenediamine	95830	January 1, 1988
p-Chloro-o-toluidine	95692	January 1, 1990
p-Chloro-o-toluidine, strong acid salts of		May 15, 1998
5-Chloro-o-toluidine and its strong acid salts		October 24, 1997
Chloroprene	126998	June 2, 2000
Chlorothalonil	1897456	January 1, 1989
Chlorotrianisene	569573	September 1, 1996
Chlorozotocin	54749905	January 1, 1992
Chromium (hexavalent compounds)		February 27, 1987
Chrysene	218019	January 1, 1990
C.I. Acid Red 114	6459945	July 1, 1992
C.I. Basic Red 9 monohydrochloride	569619	July 1, 1989
C.I. Direct Blue 15	2429745	August 26, 1997
C.I. Direct Blue 218	28407376	August 26, 1997
C.I. Solvent Yellow 14	842079	May 15, 1998
Ciclosporin (Cyclosporin A; Cyclosporine)	59865133	January 1, 1992
	79217600	
Cidofovir	113852372	January 29, 1999
Cinnamyl anthranilate	87296	July 1, 1989
Cisplatin	15663271	October 1, 1988
Citrus Red No. 2	6358538	October 1, 1989
Clofibrate	637070	September 1, 1996
Cobalt metal powder	7440484	July 1, 1992
Cobalt [II] oxide	1307966	July 1, 1992
Cobalt sulfate heptahydrate	10026241	June 2, 2000
Coke oven emissions		February 27, 1987
Conjugated estrogens		February 27, 1987
Creosotes		October 1, 1988
para-Cresidine	120718	January 1, 1988
Cupferron	135206	January 1, 1988
Cycasin	14901087	January 1, 1988
Cyclophosphamide (anhydrous)	50180	February 27, 1987
Cyclophosphamide (hydrated)	6055192	February 27, 1987
Cytembena	21739913	May 15, 1998
D&C Orange No. 17	3468631	July 1, 1990
D&C Red No. 8	2092560	October 1, 1990
D&C Red No. 9	5160021	July 1, 1990
D&C Red No. 19	81889	July 1, 1990
250 (150 (15) (15)	01000	July 1, 1000

Dacarbazine	4342034	January 1, 1988
Daminozide	1596845	January 1, 1990
Dantron (Chrysazin; 1,8-Dihydroxyanthraquinone)	117102	January 1, 1992
Daunomycin	20830813	January 1, 1988
DDD (Dichlorodiphenyldichloroethane)	72548	January 1, 1989
DDE (Dichlorodiphenyldichloroethylene)	725 <del>4</del> 8 72559	January 1, 1989
` ' '		•
DDT (Dichlorodiphenyltrichloroethane)	50293	October 1, 1987
DDVP (Dichlorvos)	62737	January 1, 1989
N,N'-Diacetylbenzidine	613354	October 1, 1989
2,4-Diaminoanisole	615054	October 1, 1990
2,4-Diaminoanisole sulfate	39156417	January 1, 1988
4,4'-Diaminodiphenyl ether (4,4'-Oxydianiline)	101804	January 1, 1988
2,4-Diaminotoluene	95807	January 1, 1988
Diaminotoluene (mixed)		January 1, 1990
Dibenz[a,h]acridine	226368	January 1, 1988
Dibenz[a,j]acridine	224420	January 1, 1988
Dibenz[a,h]anthracene	53703	January 1, 1988
7H-Dibenzo[c,g]carbazole	194592	January 1, 1988
Dibenzo[a,e]pyrene	192654	January 1, 1988
Dibenzo[a,h]pyrene	189640	January 1, 1988
Dibenzo[a,i]pyrene	189559	January 1, 1988
Dibenzo[a,l]pyrene	191300	January 1, 1988
1,2-Dibromo-3-chloropropane (DBCP)	96128	July 1, 1987
2,3-Dibromo-1-propanol	96139	October 1, 1994
Dichloroacetic acid	79436	May 1, 1996
p-Dichlorobenzene	106467	January 1, 1989
3,3'-Dichlorobenzidine	91941	October 1, 1987
3,3'-Dichlorobenzidine dihydrochloride	612839	May 15, 1998
1,4-Dichloro-2-butene	764410	January 1, 1990
3,3'-Dichloro-4,4'-diaminodiphenyl ether	28434868	January 1, 1988
1,1-Dichloroethane	75343	January 1, 1990
Dichloromethane (Methylene chloride)	75092	April 1, 1988
1,2-Dichloropropane	78875	January 1, 1990
1,3-Dichloropropene	542756	January 1, 1989
Dieldrin	60571	July 1, 1988
Dienestrol	84173	January 1, 1990
Diepoxybutane	1464535	January 1, 1988
Diesel engine exhaust	1-0-1999	October 1, 1990
	117817	January 1, 1988
Di(2-ethylhexyl)phthalate		•
1,2-Diethylhydrazine	1615801	January 1, 1988
Diethyl sulfate	64675	January 1, 1988
Diethylstilbestrol (DES)	56531	February 27, 1987
Diglycidyl resorcinol ether (DGRE)	101906	July 1, 1989
Dihydrosafrole	94586	January 1, 1988
Diisopropyl sulfate	2973106	April 1, 1993
3,3'-Dimethoxybenzidine (ortho-Dianisidine)	119904	January 1, 1988
3,3'-Dimethoxybenzidine dihydrochloride	20325400	October 1, 1990
(ortho-Dianisidine dihydrochloride)		
Dimethyl sulfate	77781	January 1, 1988
4-Dimethylaminoazobenzene	60117	January 1, 1988
trans-2-[(Dimethylamino)methylimino]-5-[2-(5-nitro-2-	55738540	January 1, 1988
furyl)vinyl]-1,3,4-oxadiazole	· <del>-</del>	<b>,</b> , <b>.</b>
7,12-Dimethylbenz(a)anthracene	57976	January 1, 1990
3,3'-Dimethylbenzidine (ortho-Tolidine)	119937	January 1, 1988
5,5 2.mony locality (orang rollality)	110001	January 1, 1000

3,3'-Dimethylbenzidine dihydrochloride Dimethylcarbamoyl chloride 1,1-Dimethylhydrazine (UDMH) 1,2-Dimethylhydrazine Dimethylvinylchloride 3,7-Dinitrofluoranthene 3,9-Dinitrofluoranthene 1,6-Dinitropyrene 1,8-Dinitropyrene Dinitrotoluene mixture, 2,4-/2,6- 2,4-Dinitrotoluene 2,6-Dinitrotoluene Di-n-propyl isocinchomeronate (MGK Repellent 326) 1,4-Dioxane Diphenylhydantoin (Phenytoin) Diphenylhydantoin (Phenytoin), sodium salt Direct Black 38 (technical grade) Direct Brown 95 (technical grade) Disperse Blue 1	612828 79447 57147 540738 513371 105735715 22506532 42397648 42397659  121142 606202 136458 123911 57410 630933 1937377 2602462 16071866 2475458	April 1, 1992 January 1, 1988 October 1, 1989 January 1, 1988 July 1, 1989 August 26, 1997 August 26, 1997 October 1, 1990 October 1, 1990 May 1, 1996 July 1, 1988 July 1, 1995 May 1, 1996 January 1, 1988 October 1, 1988 October 1, 1990
Epichlorohydrin Erionite Estradiol 17B Estragole Estrone Estropipate Ethinylestradiol Ethoprop Ethyl acrylate Ethyl methanesulfonate Ethyl-4,4'-dichlorobenzilate Ethylene dibromide Ethylene dichloride (1,2-Dichloroethane) Ethylene thiourea Ethylene thiourea Ethyleneimine	106898 12510428 50282 140670 53167 7280377 57636 13194484 140885 62500 510156 106934 107062 75218 96457 151564	October 1, 1987 October 1, 1988 January 1, 1988 October 29, 1999 January 1, 1988 August 26, 1997 January 1, 1988 February 27, 2001 July 1, 1989 January 1, 1988 January 1, 1990 July 1, 1987 October 1, 1987 July 1, 1987 January 1, 1988 January 1, 1988
Fenoxycarb Folpet Formaldehyde (gas) 2-(2-Formylhydrazino)-4-(5-nitro-2-furyl)thiazole Furan Furazolidone Furmecyclox Fusarin C	72490018 133073 50000 3570750 110009 67458 60568050 79748815	June 2, 2000 January 1, 1989 January 1, 1988 January 1, 1988 October 1, 1993 January 1, 1990 July 1, 1995
Ganciclovir sodium Gasoline engine exhaust (condensates/extracts) Gemfibrozil Glasswool fibers (airborne particles of respirable size) Glu-P-1 (2-Amino-6-methyldipyrido[1,2-a:3',2'-d]imidazole) Glu-P-2 (2-Aminodipyrido[1,2-a:3',2'-d]imidazole)	82410320  25812300  67730114 67730103	August 26, 1997 October 1, 1990 December 22, 2000 July 1, 1990 January 1, 1990 January 1, 1990

Glycidaldehyde Glycidol Griseofulvin Gyromitrin (Acetaldehyde methylformylhydrazone)	765344 556525 126078 16568028	January 1, 1988 July 1, 1990 January 1, 1990 January 1, 1988
HC Blue 1 Heptachlor Heptachlor epoxide Hexachlorobenzene Hexachlorocyclohexane (technical grade) Hexachlorodibenzodioxin Hexachloroethane Hexamethylphosphoramide Hydrazine Hydrazine sulfate Hydrazobenzene (1,2-Diphenylhydrazine)	2784943 76448 1024573 118741  34465468 67721 680319 302012 10034932 122667	July 1, 1989 July 1, 1988 July 1, 1988 October 1, 1987 October 1, 1987 April 1, 1988 July 1, 1990 January 1, 1988 January 1, 1988 January 1, 1988 January 1, 1988
Indeno [1,2,3-cd]pyrene Indium phosphide IQ (2-Amino-3-methylimidazo[4,5-f]quinoline) Iprodione Iron dextran complex Isobutyl nitrite Isoprene Isosafrole Isoxaflutole	193395 22398807 76180966 36734197 9004664 542563 78795 120581 141112290	January 1, 1988 February 27, 2001 April 1, 1990 May 1, 1996 January 1, 1988 May 1, 1996 May 1, 1996 October 1, 1989 December 22, 2000
Lactofen Lasiocarpine Lead acetate Lead and lead compounds Lead phosphate Lead subacetate Lindane and other hexachlorocyclohexane isomers Lynestrenol	77501634 303344 301042  7446277 1335326  52766	January 1, 1989 April 1, 1988 January 1, 1988 October 1, 1992 April 1, 1988 October 1, 1989 October 1, 1989 February 27, 2001
Mancozeb Maneb Me-A-alpha-C (2-Amino-3-methyl-9H-pyrido[2,3-b]indole) Medroxyprogesterone acetate MelQ(2-Amino-3,4-dimethylimidazo[4,5-f]quinoline) MelQx(2-Amino-3,8-dimethylimidazo[4,5-f]quinoxaline) Melphalan Merphalan Mestranol Metham sodium 8-Methoxypsoralen with ultraviolet A therapy 5-Methoxypsoralen with ultraviolet A therapy 2-Methylaziridine (Propyleneimine) Methylazoxymethanol Methylazoxymethanol acetate Methyl carbamate 3-Methylcholanthrene 5-Methylchrysene	8018017 12427382 68006837 71589 77094112 77500040 148823 531760 72333 137428 298817 484208 75558 590965 592621 598550 56495 3697243	January 1, 1990 January 1, 1990 January 1, 1990 January 1, 1990 October 1, 1994 October 1, 1994 February 27, 1987 April 1, 1988 April 1, 1988 November 6, 1998 February 27, 1987 October 1, 1988 January 1, 1988 April 1, 1988 April 1, 1988 April 1, 1988 May 15, 1998 January 1, 1990 April 1, 1988

4,4'-Methylene bis(2-chloroaniline) 4,4'-Methylene bis(N,N-dimethyl)benzenamine 4,4'-Methylene bis(2-methylaniline) 4,4'-Methylenedianiline 4,4'-Methylenedianiline dihydrochloride Methylhydrazine and its salts Methyl iodide Methylmercury compounds Methyl methanesulfonate 2-Methyl-1-nitroanthraquinone (of uncertain purity) N-Methyl-N'-nitro-N-nitrosoguanidine N-Methylolacrylamide Methylthiouracil Metiram Metronidazole Michler's ketone Mirex Mitomycin C Monocrotaline 5-(Morpholinomethyl)-3-[(5-nitro-furfurylidene)-amino]-2-oxazolidinone	101144 101611 838880 101779 13552448  74884  66273 129157 70257 924425 56042 9006422 443481 90948 2385855 50077 315220 139913	July 1, 1987 October 1, 1989 April 1, 1988 January 1, 1988 January 1, 1988 July 1, 1992 April 1, 1988 May 1, 1996 April 1, 1988 April 1, 1988 April 1, 1988 July 1, 1990 October 1, 1989 January 1, 1989 January 1, 1988 January 1, 1988 January 1, 1988 April 1, 1988 April 1, 1988 April 1, 1988
Mustard Gas MX (3-chloro-4-dichloromethyl-5-hydroxy-2(5H)-furanone)	505602 77439760	February 27, 1987 December 22, 2000
Nafenopin Nalidixic acid 1-Naphthylamine 2-Naphthylamine Nickel and certain nickel compounds Nickel carbonyl Nickel refinery dust from the pyrometallurgical process Nickel subsulfide Niridazole Nitrilotriacetic acid Nitrilotriacetic acid, trisodium salt monohydrate 5-Nitroacenaphthene 5-Nitro-o-anisidine o-Nitroanisole Nitrobenzene 4-Nitrobiphenyl 6-Nitrochrysene Nitrofen (technical grade) 2-Nitrofluorene Nitrofurazone 1-[(5-Nitro-2-furyl)-2-thiazolyl]acetamide Nitrogen mustard (Mechlorethamine) Nitrogen mustard hydrochloride (Mechlorethamine hydrochloride) Nitrogen mustard N-oxide	3771195 389082 134327 91598  13463393  12035722 61574 139139 18662538 602879 99592 91236 98953 92933 7496028 1836755 607578 59870 555840 531828 51752 55867	April 1, 1988 May 15, 1998 October 1, 1989 February 27, 1987 October 1, 1987 October 1, 1987 October 1, 1987 October 1, 1987 April 1, 1988 January 1, 1988 April 1, 1988 October 1, 1992 August 26, 1997 April 1, 1988 October 1, 1990 January 1, 1988 October 1, 1990 January 1, 1988 October 1, 1990 January 1, 1988 April 1, 1988
Nitrogen mustard N-oxide hydrochloride Nitromethane 2-Nitropropane 1-Nitropyrene	302705 75525 79469 5522430	April 1, 1988 May 1, 1997 January 1, 1988 October 1, 1990

4-Nitrosodi-n-butylamine N-Nitrosodiethanolamine N-Nitrosodiethylamine N-Nitrosodimethylamine p-Nitrosodiphenylamine N-Nitrosodiphenylamine N-Nitrosodi-n-propylamine N-Nitroso-N-ethylurea 3-(N-Nitrosomethylamino)propionitrile 4-(N-Nitrosomethylamino)-1-(3-pyridyl)1-butanone N-Nitrosomethylethylamine N-Nitroso-N-methylurea N-Nitroso-N-methylurea N-Nitrosomethylvinylamine N-Nitrosomethylvinylamine N-Nitrosomorpholine N-Nitrosonornicotine N-Nitrosopyrrolidine N-Nitrososarcosine o-Nitrotoluene Norethisterone (Norethindrone) Norethynodrel	57835924 924163 1116547 55185 62759 156105 86306 621647 759739 60153493 64091914 10595956 684935 615532 4549400 59892 16543558 100754 930552 13256229 88722 68224 68235	October 1, 1990 October 1, 1987 January 1, 1988 October 1, 1987 October 1, 1987 January 1, 1988 April 1, 1988 January 1, 1988 October 1, 1987 April 1, 1990 April 1, 1990 October 1, 1987 April 1, 1988 January 1, 1988 October 1, 1987 January 1, 1988 October 1, 1987 January 1, 1988 May 15, 1998 October 1, 1989 February 27, 2001
Ochratoxin A Oil Orange SS Oral contraceptives, combined Oral contraceptives, sequential Oxadiazon Oxazepam Oxymetholone Oxythioquinox	303479 2646175  19666309 604751 434071 2439012	July 1, 1990 April 1, 1988 October 1, 1989 October 1, 1989 July 1, 1991 October 1, 1994 January 1, 1988 August 20, 1999
Palygorskite fibers (> 5µm in length) Panfuran S Pentachlorophenol Phenacetin Phenazopyridine Phenazopyridine hydrochloride Phenesterin Phenobarbital Phenolphthalein Phenoxybenzamine Phenoxybenzamine hydrochloride o-Phenylenediamine and its salts Phenyl glycidyl ether Phenylhydrazine and its salts o-Phenylphenate, sodium o-Phenylphenol PhiP(2-Amino-1-methyl-6-phenylimidazol[4,5-b]pyridine) Polybrominated biphenyls Polychlorinated biphenyls Polychlorinated biphenyls (containing 60 or more	12174117 794934 87865 62442 94780 136403 3546109 50066 77098 59961 63923 95545 122601  132274 90437 105650235	December 28, 1999 January 1, 1988 January 1, 1990 October 1, 1989 January 1, 1988 January 1, 1988 July 1, 1989 January 1, 1990 May 15, 1998 April 1, 1988 April 1, 1988 April 1, 1988 May 15, 1998 October 1, 1990 July 1, 1992 January 1, 1990 August 4, 2000 October 1, 1994 January 1, 1988 October 1, 1988 October 1, 1989 January 1, 1988

paraent ablaring by malagular weight)		
percent chlorine by molecular weight)		Octobor 1 1002
Polychlorinated dibenzo-p-dioxins Polychlorinated dibenzofurans	<b></b>	October 1, 1992 October 1, 1992
Polygeenan	53973981	January 1, 1988
Ponceau MX	3761533	April 1, 1988
Ponceau 3R	3564098	April 1, 1988
Potassium bromate	7758012	
		January 1, 1990
Primidone Pracarhagina	125337	August 20, 1999
Procarbazine	671169	January 1, 1988
Procarbazine hydrochloride	366701	January 1, 1988
Procymidone Progesterene	32809168	October 1, 1994
Progesterone	57830	January 1, 1988
Pronamide Propagallar	23950585	May 1, 1996
Propachlor	1918167	February 27, 2001
1,3-Propane sultone	1120714	January 1, 1988
Propargite	2312358	October 1, 1994
beta-Propiolactone	57578 75560	January 1, 1988
Propylene oxide	75569	October 1, 1988
Propylthiouracil	51525	January 1, 1988
Quinoline and its strong acid salts		October 24, 1997
Radionuclides		July 1, 1989
Reserpine	50555	October 1, 1989
Residual (heavy) fuel oils		October 1, 1990
Saccharin Delisted April 6, 2001	<del>81072</del>	October 1, 1989
Saccharin, sodium	128449	January 1, 1988
Safrole	94597	January 1, 1988
Salicylazosulfapyridine	599791	May 15, 1998
Selenium sulfide	7446346	October 1, 1989
Shale-oils	68308349	April 1, 1990
Silica, crystalline (airborne particles of respirable size)		October 1, 1988
Soots, tars, and mineral oils (untreated and mildly treated oils and used engine oils)		February 27, 1987
Spironolactone	52017	May 1, 1997
Stanozolol	10418038	May 1, 1997
Sterigmatocystin	10048132	April 1, 1988
Streptozotocin (streptozocin)	18883664	January 1, 1988
Styrene oxide	96093	October 1, 1988
Sulfallate	95067	January 1, 1988
Cultulate	30001	dandary 1, 1500
Talc containing asbestiform fibers		April 1, 1990
Tamoxifen and its salts	10540291	September 1, 1996
Terrazole	2593159	October 1, 1994
Testosterone and its esters	58220	April 1, 1988
2,3,7,8-Tetrachlorodibenzo-para-dioxin (TCDD)	1746016	January 1, 1988
1,1,2,2-Tetrachloroethane	79345	July 1, 1990
Tetrachloroethylene (Perchloroethylene)	127184	April 1, 1988
p-a,a,a-Tetrachlorotoluene	5216251	January 1, 1990
Tetrafluoroethylene	116143	May 1, 1997
Tetranitromethane	509148	July 1, 1990
Thioacetamide	62555	January 1, 1988
4,4'-Thiodianiline	139651	April 1, 1988

Thiodicarb Thiourea Thorium dioxide Tobacco, oral use of smokeless products Tobacco smoke Toluene diisocyanate ortho-Toluidine ortho-Toluidine hydrochloride para-Toluidine Delisted October 29, 1999 Toxaphene (Polychlorinated camphenes) Treosulfan Trichlormethine (Trimustine hydrochloride) Trichloroethylene 2,4,6-Trichlorophenol 1,2,3-Trichloropropane Trimethyl phosphate 2,4,5-Trimethylaniline and its strong acid salts Triphenyltin hydroxide Tris(aziridinyl)-para-benzoquinone (Triaziquone) Tris(1-aziridinyl)phosphine sulfide (Thiotepa) Tris(2-chloroethyl) phosphate Tris(2,3-dibromopropyl)phosphate Trp-P-1 (Tryptophan-P-1) Trp-P-2 (Tryptophan-P-2) Trypan blue (commercial grade)	59669260 62566 1314201  26471625 95534 636215 106490 8001352 299752 817094 79016 88062 96184 512561  76879 68768 52244 115968 126727 62450060 62450071 72571	August 20, 1999 January 1, 1988 February 27, 1987 April 1, 1988 April 1, 1988 October 1, 1989 January 1, 1988 January 1, 1988 January 1, 1988 February 27, 1987 January 1, 1992 April 1, 1988 January 1, 1988 October 1,1992 May 1, 1996 October 24, 1997 July 1, 1992 October 1, 1989 January 1, 1988 April 1, 1992 January 1, 1988 April 1, 1988 April 1, 1988 April 1, 1988 April 1, 1988 October 1, 1989
Unleaded gasoline (wholly vaporized) Uracil mustard Urethane (Ethyl carbamate)	66751 51796	April 1, 1988 April 1, 1988 January 1, 1988
Vinclozolin Vinyl bromide Vinyl chloride 4-Vinylcyclohexene 4-Vinyl-1-cyclohexene diepoxide (Vinyl cyclohexenedioxide) Vinyl fluoride Vinyl trichloride (1,1,2-Trichloroethane)	50471448 593602 75014 100403 106876 75025 79005	August 20, 1999 October 1, 1988 February 27, 1987 May 1, 1996 July 1, 1990 May 1, 1997 October 1, 1990
2,6-Xylidine (2,6-Dimethylaniline)	87627	January 1, 1991
Zileuton Zineb Delisted October 29, 1999	111406872 <del>12122677</del>	December 22, 2000 <del>January 1, 1990</del>

## CHEMICALS KNOWN TO THE STATE TO CAUSE REPRODUCTIVE TOXICITY

## **Developmental toxicity**

Acetazolamide	59665	August 20, 1999
Acetohydroxamic acid	546883	April 1, 1990
Actinomycin D	50760	October 1, 1992
All-trans retinoic acid	302794	January 1, 1989
Alprazolam	28981977	July 1, 1990
Altretamine	645056	August 20, 1999

Amantadine hydrochloride Amikacin sulfate Aminoglutethimide Aminoglycosides Aminopterin Amiodarone hydrochloride Amitraz Amoxapine Angiotensin converting enzyme (ACE) inhibitors Anisindione Arsenic (inorganic oxides) Aspirin (NOTE: It is especially important not to use aspirin during the last three months of pregnancy, unless specifically directed to do so by a physician because it may cause problems in the unborn child or complications during delivery.)	665667 39831555 125848  54626 19774824 33089611 14028445  117373  50782	February 27, 2001 July 1, 1990 July 1, 1990 October 1, 1992 July 1, 1987 August 26, 1997 March 30, 1999 May 15, 1998 October 1, 1992 October 1, 1992 May 1, 1997 July 1, 1990
Atenolol Auranofin Azathioprine	29122687 34031328 446866	August 26, 1997 January 29, 1999 September 1, 1996
Barbiturates Beclomethasone dipropionate Benomyl Benzene Benzphetamine hydrochloride Benzodiazepines Bischloroethyl nitrosourea (BCNU) (Carmustine) Bromacil lithium salt Bromoxynil Bromoxynil octanoate Butabarbital sodium 1,4-Butanediol dimethanesulfonate (Busulfan)	5534098 17804352 71432 5411223  154938 53404196 1689845 1689992 143817 55981	October 1, 1992 May 15, 1998 July 1, 1991 December 26, 1997 April 1, 1990 October 1, 1992 July 1, 1990 May 18, 1999 October 1, 1990 May 18, 1999 October 1, 1992 January 1, 1989
Cadmium Carbamazepine Carbon disulfide Carbon monoxide Carboplatin Chenodiol Chinomethionat (Oxythioquinox) Chlorambucil Chlorcyclizine hydrochloride Chlordecone (Kepone) Chlordiazepoxide Chlordiazepoxide hydrochloride 1-(2-Chloroethyl)-3-cyclohexyl-1-nitrosourea (CCNU) (Lomustine)	298464 75150 630080 41575944 474259 2439012 305033 1620219 143500 58253 438415 13010474	May 1, 1997 January 29, 1999 July 1, 1989 July 1, 1989 July 1, 1990 April 1, 1990 November 6, 1998 January 1, 1989 July 1, 1987 January 1, 1989 January 1, 1992 January 1, 1992 July 1, 1990
Chlorsulfuron Cidofovir Cladribine Clarithromycin Clobetasol propionate Clomiphene citrate Clorazepate dipotassium	64902723 113852372 4291638 81103119 25122467 50419 57109907	May 14, 1999 January 29, 1999 September 1, 1996 May 1, 1997 May 15, 1998 April 1, 1990 October 1, 1992

Cocaine Codeine phosphate Colchicine Conjugated estrogens Cyanazine Cycloate Cycloheximide Cyclophosphamide (anhydrous) Cyclophosphamide (hydrated) Cyhexatin Cytarabine	50362 52288 64868  21725462 1134232 66819 50180 6055192 13121705 147944	July 1, 1989 May 15, 1998 October 1, 1992 April 1, 1990 April 1, 1990 March 19, 1999 January 1, 1989
Dacarbazine Danazol Daunorubicin hydrochloride 2,4-D butyric acid o,p'-DDT p,p'-DDT 2,4-DP (dichloroprop) Demeclocycline hydrochloride (internal use) Diazepam Diazoxide Dichlorophene Dichlorophenamide Diclofop methyl Dicumarol Diethylstilbestrol (DES) Diflunisal Dihydroergotamine mesylate Diltiazem hydrochloride Dinocap Dinoseb Diphenylhydantoin (Phenytoin) Disodium cyanodithioimidocarbonate Doxorubicin hydrochloride Doxycycline (internal use) Doxycycline calcium (internal use) Doxycycline monohydrate (internal use) Endrin Ergotamine tartrate Estropipate	4342034 17230885 23541506 94826 789026 50293 120365 64733 439145 364987 97234 120978 51338273 66762 56531 22494424 6190392 33286225 39300453 88857 57410 138932 23214928 564250 94088854 24390145 17086281 72208 379793 7280377	January 29, 1999 April 1, 1990 July 1, 1990 June 18, 1998 May 15, 1998 May 15, 1998 April 27, 1999 January 1, 1992 January 1, 1992 February 27, 2001 April 27, 1999 February 27, 2001 March 5, 1999 October 1, 1992 July 1, 1987 January 29, 1999 May 1, 1997 February 27, 2001 April 1, 1997 February 27, 2001 April 1, 1997 February 27, 2001 April 1, 1997 January 1, 1989 July 1, 1987 March 30, 1999 January 29, 1999 July 1, 1990 January 1, 1990 January 1, 1991 October 1, 1991 May 15, 1998 April 1, 1990 August 26, 1997
Ethionamide Ethyl alcohol in alcoholic beverages Ethyl dipropylthiocarbamate Ethylene dibromide Ethylene glycol monoethyl ether Ethylene glycol monomethyl ether Ethylene glycol monoethyl ether acetate Ethylene glycol monomethyl ether acetate Ethylene thiourea Etodolac Etoposide	7280377 536334  759944 106934 110805 109864 111159 110496 96457 41340254 33419420	August 26, 1997 August 26, 1997 October 1, 1987 April 27, 1999 May 15, 1998 January 1, 1989 January 1, 1993 January 1, 1993 January 1, 1993 January 1, 1993 August 20, 1999 July 1, 1990

Etretinate	54350480	July 1, 1987
Fenoxaprop ethyl Filgrastim Fluazifop butyl Flunisolide Fluorouracil Fluoxymesterone Flurazepam hydrochloride Flurbiprofen Flutamide Fluticasone propionate Fluvalinate	66441234 121181531 69806504 3385033 51218 76437 1172185 5104494 13311847 80474142 69409945	March 26, 1999 February 27, 2001 November 6, 1998 May 15, 1998 January 1, 1989 April 1, 1990 October 1, 1992 August 20, 1999 July 1, 1990 May 15, 1998 November 6, 1998
Ganciclovir sodium Goserelin acetate	82410320 65807025	August 26, 1997 August 26, 1997
Halazepam Halobetasol propionate Haloperidol Halothane Heptachlor Hexachlorobenzene Histrelin acetate Hydramethylnon Hydroxyurea	23092173 66852548 52868 151677 76448 118741  67485294 127071	July 1, 1990 August 20, 1999 January 29, 1999 September 1, 1996 August 20, 1999 January 1, 1989 May 15, 1998 March 5, 1999 May 1, 1997
Idarubicin hydrochloride Ifosfamide Iodine-131 Isotretinoin	57852570 3778732 10043660 4759482	August 20, 1999 July 1, 1990 January 1, 1989 July 1, 1987
Lead Leuprolide acetate Levodopa Linuron Lithium carbonate Lithium citrate Lorazepam Lovastatin	74381536 59927 330552 554132 919164 846491 75330755	February 27, 1987 August 26, 1997 January 29, 1999 March 19, 1999 January 1, 1991 January 1, 1991 July 1, 1990 October 1, 1992
Mebendazole Medroxyprogesterone acetate Megestrol acetate Melphalan Menotropins Meprobamate Mercaptopurine Mercury and mercury compounds Methacycline hydrochloride Metham sodium Methazole Methimazole Methotrexate	31431397 71589 595335 148823 9002680 57534 6112761  3963959 137428 20354261 60560 59052	August 20, 1999 April 1, 1990 January 1, 1991 July 1, 1990 April 1, 1990 January 1, 1992 July 1, 1990 January 1, 1991 May 15, 1998 December 1, 1999 July 1, 1990 January 1, 1989

Methotrexate sodium Methyl bromide as a structural fumigant Methyl chloride Methyl mercury Methyltestosterone Metiram Midazolam hydrochloride Minocycline hydrochloride (internal use) Misoprostol Mitoxantrone hydrochloride Myclobutanil	15475566 74839 74873  58184 9006422 59467968 13614987 59122462 70476823 88671890	April 1, 1990 January 1, 1993 March 10, 2000 July 1, 1987 April 1, 1990 March 30, 1999 July 1, 1990 January 1, 1992 April 1, 1990 July 1, 1990 April 16, 1999
Nabam Nafarelin acetate Neomycin sulfate (internal use) Netilmicin sulfate Nickel carbonyl Nicotine Nifedipine Nimodipine	142596 86220420 1405103 56391572 13463393 54115 21829254 66085594	March 30, 1999 April 1, 1990 October 1, 1992 July 1, 1990 September 1, 1996 April 1, 1990 January 29, 1999 April 24, 2001
Nitrapyrin Nitrogen mustard (Mechlorethamine) Nitrogen mustard hydrochloride (Mechlorethamine hydrochloride)	1929824 51752 55867	March 30, 1999 January 1, 1989 July 1, 1990
Norethisterone (Norethindrone) Norethisterone acetate (Norethindrone acetate) Norethisterone (Norethindrone)/Ethinyl estradiol Norethisterone (Norethindrone)/Mestranol Norgestrel	68224 51989 68224/57636 68224/72333 6533002	April 1, 1990 October 1, 1991 April 1, 1990 April 1, 1990 April 1, 1990
Oxadiazon Oxazepam Oxymetholone Oxytetracycline (internal use) Oxytetracycline hydrochloride (internal use)	19666309 604751 434071 79572 2058460	May 15, 1998 October 1, 1992 May 1, 1997 January 1, 1991 October 1, 1991
Paclitaxel Paramethadione Penicillamine Pentobarbital sodium Pentostatin Phenacemide Phenprocoumon Pimozide Pipobroman Plicamycin Polybrominated biphenyls Polychlorinated biphenyls Potassium dimethyldithiocarbamate Pravastatin sodium Prednisolone sodium phosphate Propargite Propylthiouracil	33069624 115673 52675 57330 53910251 63989 435972 2062784 54911 18378897  128030 81131706 125020 366701 2312358 51525	August 26, 1997 July 1, 1990 January 1, 1991 July 1, 1990 September 1, 1996 July 1, 1990 October 1, 1992 August 20, 1999 July 1, 1990 October 1, 1994 January 1, 1991 March 30 1999 March 3, 2000 August 20, 1999 July 1, 1990 July 1, 1990 June 15, 1999 July 1, 1990

Pyrimethamine	58140	January 29, 1999
Quazepam	36735225	August 26, 1997
Resmethrin Retinol/retinyl esters, when in daily dosages in excess of 10,000 IU, or 3,000 retinol equivalents. (NOTE: Retinol/retinyl esters are required and essential for maintenance of normal reproductive function. The recommended daily level during pregnancy is 8,000 IU.)	10453868 	November 6, 1998 July 1, 1989
Ribavirin Rifampin	36791045 13292461	April 1, 1990 February 27, 2001
Secobarbital sodium Sermorelin acetate Sodium dimethyldithiocarbamate Streptomycin sulfate Streptozocin (streptozotocin) Sulindac	309433  128041 3810740 18883664 38194502	October 1, 1992 August 20, 1999 March 30 1999 January 1, 1991 August 20, 1999 January 29, 1999
Tamoxifen citrate Temazepam Teniposide Terbacil Testosterone cypionate Testosterone enanthate 2,3,7,8-Tetrachlorodibenzo-para-dioxin (TCDD) Tetracycline (internal use) Tetracyclines (internal use) Tetracycline hydrochloride (internal use) Thalidomide Thioguanine Tobacco smoke (primary) Tobramycin sulfate Toluene Triadimefon Triazolam Tributyltin methacrylate Trientine hydrochloride Triforine  Trilostane	54965241 846504 29767202 5902512 58208 315377 1746016 60548  64755 50351 154427  49842071 108883 43121433 28911015 2155706 38260014 26644462 37273840 13647353	July 1, 1990 April 1, 1990 September 1, 1996 May 18, 1999 October 1, 1991 April 1, 1990 April 1, 1991 October 1, 1991 October 1, 1991 October 1, 1992 January 1, 1991 July 1, 1987 July 1, 1987 July 1, 1988 July 1, 1990 April 1, 1988 July 1, 1990 January 1, 1991 March 30, 1999 April 1, 1990 December 1, 1999 February 27, 2001 June 18, 1999 April 1, 1990
Trimethadione Trimetrexate glucuronate	127480 82952645	January 1, 1991 August 26, 1997
Uracil mustard Urethane Urofollitropin	66751 51796 26995915	January 1, 1992 October 1, 1994 April 1, 1990
Valproate (Valproic acid) Vinblastine sulfate Vinclozolin Vincristine sulfate	99661 143679 50471448 2068782	July 1, 1987 July 1, 1990 May 15, 1998 July 1, 1990

Warfarin	81812	July 1, 1987
Zileuton	111406872	December 22, 2000
Female reproductive toxicity		
Aminopterin Amiodarone hydrochloride Anabolic steroids Aspirin (NOTE: It is especially important not to use aspirin during the last three months of pregnancy, unless specifically directed to do so by a physician because it may cause problems in the unborn child or complications during delivery.)	54626 19774824  50782	July 1, 1987 August 26, 1997 April 1, 1990 July 1, 1990
Carbon disulfide Chlorsulfuron Cidofovir Clobetasol propionate Cocaine Cyclophosphamide (anhydrous) Cyclophosphamide (hydrated)	75150 64902723 113852372 25122467 50362 50180 6055192	July 1, 1989 May 14, 1999 January 29, 1999 May 15, 1998 July 1, 1989 January 1, 1989 January 1, 1989
o,p · -DDT p,p · -DDT Diflunisal Dinitrotoluene (technical grade)	789026 50293 22494424 	May 15, 1998 May 15, 1998 January 29, 1999 August 20, 1999
Ethylene oxide Etodolac	75218 41340254	February 27, 1987 August 20, 1999
Flunisolide Flurbiprofen	3385033 5104494	May 15, 1998 August 20, 1999
Gemfibrozil Goserelin acetate	25812300 65807025	August 20, 1999 August 26, 1997
Haloperidol	52868	January 29, 1999
Lead Leuprolide acetate Levonorgestrel implants	74381536 797637	February 27, 1987 August 26, 1997 May 15, 1998
Nifedipine	21829254	January 29, 1999
Oxydemeton methyl	301122	November 6, 1998
Paclitaxel Pimozide	33069624 2062784	August 26, 1997 August 20, 1999
Rifampin	13292461	February 27, 2001
Streptozocin (streptozotocin)	18883664	August 20, 1999

Sulindac	38194502	January 29, 1999
Thiophanate methyl	23564058	May 18, 1999
Tobacco smoke (primary) Triadimefon	43121433	April 1, 1988 March 30, 1999
Uracil mustard	66751	January 1, 1992
Zileuton	111406872	December 22, 2000
Male reproductive toxicity		
Altretamine Amiodarone hydrochloride Anabolic steroids	645056 19774824 	August 20, 1999 August 26, 1997 April 1, 1990
Benomyl Benzene	17804352 71432	July 1, 1991 December 26, 1997
Cadmium Carbon disulfide Chlorsulfuron Cidofovir Colchicine Cyclohexanol Cyclophosphamide (anhydrous) Cyclophosphamide (hydrated)	75150 64902723 113852372 64868 108930 50180 6055192	May 1, 1997 July 1, 1989 May 14, 1999 January 29, 1999 October 1, 1992 November 6, 1998 January 1, 1989 January 1, 1989
2,4-D butyric acid o,p'-DDT p,p'-DDT 1,2-Dibromo-3-chloropropane (DBCP) m-Dinitrobenzene o-Dinitrobenzene p-Dinitrobenzene 2,4-Dinitrotoluene 2,6-Dinitrotoluene Dinitrotoluene (technical grade) Dinoseb Doxorubicin hydrochloride	94826 789026 50293 96128 99650 528290 100254 121142 606202  88857 23214928	June 18, 1999 May 15, 1998 May 15, 1998 February 27, 1987 July 1, 1990 July 1, 1990 July 1, 1990 August 20, 1999 August 20, 1999 January 1, 1989 January 29, 1999
Epichlorohydrin Ethylene dibromide Ethylene glycol monoethyl ether Ethylene glycol monomethyl ether Ethylene glycol monoethyl ether acetate Ethylene glycol monomethyl ether acetate	106898 106934 110805 109864 111159 110496	September 1, 1996 May 15, 1998 January 1, 1989 January 1, 1989 January 1, 1993 January 1, 1993
Ganciclovir sodium Gemfibrozil Goserelin acetate	82410320 25812300 65807025	August 26, 1997 August 20, 1999 August 26, 1997
Hexamethylphosphoramide Hydramethylnon	680319 67485294	October 1, 1994 March 5, 1999

Idarubicin hydrochloride	57852570	August 20, 1999
Lead Leuprolide acetate	 74381536	February 27, 1987 August 26, 1997
Myclobutanil	88671890	April 16, 1999
Nifedipine Nitrofurantoin	21829254 67209	January 29, 1999 April 1, 1991
Oxydemeton methyl	301122	November 6, 1998
Paclitaxel	33069624	August 26, 1997
Quizalofop-ethyl	76578148	December 24, 1999
Ribavirin	36791045	February 27, 2001
Sodium fluoroacetate Streptozocin (streptozotocin) Sulfasalazine	62748 18883664 599791	November 6, 1998 August 20, 1999 January 29, 1999
Thiophanate methyl Tobacco smoke (primary) Triadimefon	23564058  43121433	May 18, 1999 April 1, 1988 March 30, 1999
Uracil mustard	66751	January 1, 1992

Date: April 20, 2001